

REMARKS

Entry of the foregoing and reexamination and reconsideration of the subject application, as amended, pursuant to and consistent with 37 C.F.R. § 112, are respectfully requested in light of the following remarks.

Upon entry of the foregoing amendments, Claims 31-47 and 49-55 will be in this application.

Claim 55 has been added.

Claims 31 and 50 have been amended to recite an expandable polyamide composition. Support for the composition being a polyamide is found in the specification at least in the title of the application and on page 1, lines 4-6; page 3, lines 1 and 23-24; page 16, line 14-15; page 1, lines 4-6; page 23, lines 9 and 23; page 24, line 12; and original claim 22. Claim 32 has been amended to recite the numeric value in commonly used numeric format using a comma to indicate the thousands place, rather than the European style in which the claim was originally written. Claims 49 and 53 have been amended to recite "an additive selected from the group consisting of." Support for these amendments is found at least on page 14, line 24 - page 15, line 2 of the specification. Claim 50 has been amended to recite proper claim language, to delete the phrase "of aromatic nature" and to recite that the heterocycle is aromatic. Support for these amendments is found in the previous version of these claims.

Newly added claim 55 recites an expandable polyamide composition comprising a two components where component A comprises a compound having at least one isocyanate function and component B is a polyamide where at least one

polyamide has an acid function. Support for this new claim is found in cancelled claim 48 and in the specification at least on page 5, lines 20-23 and page 21 Table 1, example compositions E, H, J and K.

No new matter has been added in making these amendments.

Claim Objections

Claims 49 and 53 are objected to as lacking clarity. The Examiner has kindly provided suggested language to address this objection.

Claims 49 and 53 have been amended to recite "further comprising an additive selected from the group consisting of" as suggested by the Examiner.

Claims 50-54 are objected to because claim 50 depends from cancelled claim 21.

Claim 50 has been amended to depend from claim 31.

Applicants therefore request withdrawal of these objections.

35 U.S.C. §112 second paragraph Rejections

Claim 48 has been rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention.

The Office Action indicates that claim 31 sets forth components B and C as two distinct compounds. The Office Action indicates that it is not clear what is intended by the limitation that compound C is polyamide B in dependent claim 48.

Claim 48 has been cancelled, rendering this rejection moot.

Applicants therefore request withdrawal of this rejection under 35 U.S.C. §112, second paragraph.

General Comment Regarding Polyamides versus Polyurethanes.

The instant application relates to expandable polyamide compositions. One of ordinary skill in the art would recognize that polyamides are formed from a condensation reaction of an amino group and a carboxylic acid or an acid chloride.

Many of the cited prior art references are related to polyurethanes. One of ordinary skill in the art would recognize that polyurethanes are formed by reacting a polyol (an alcohol with more than two reactive hydroxyl groups per molecule) with a diisocyanate or a polymeric isocyanate in the presence of suitable catalysts and additives. Such a person would recognize that polyols can be formed by: (1) base-catalyzed addition of propylene oxide, ethylene oxide onto a hydroxyl or amine containing initiator, or (2) polyesterification of a di-acid, such as adipic acid, with glycols, such as ethylene glycol or dipropylene glycol (DPG).

A person of ordinary skill in the art would recognize that polyamides and polyurethanes have different properties. For example, polyurethane foams do not have good thermal resistance, while polyamide foams have very good thermal resistance. Polyurethane foams have crosslinked structure, due to crosslinking reactions of the isocyanate functions with the polyols, while polyamide foams do not have such crosslinking.

The distinction between polyamides and polyurethanes is important because the teachings of many of the cited prior art references are related to polyurethanes, not polyamides, and one of ordinary skill in the art would recognize these are distinct groups of compounds having distinct properties and would not expect to combine teachings related to a polyurethane with teachings related to a polyamide.

35 U.S.C. §102 prior art rejections

Claims 31, 39-43, 47-51 and 53 have been rejected under 35 U.S.C. §102(b) as being anticipated by Blount. (US 4,374,976)

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." (MPEP 2131).

Blount discloses a process for the production of a polyamide silicate resinous product produced by reacting a halosilicon acid, an organic polyamine and a polycarboxylic acid and/or polycarboxylic acid anhydride. Blount teaches the polyamide silicate resinous products may be reacted with polyisocyanates to produce polyurethane foams. (see abstract, col. 7 lines 46-48; col. 16, lines 29-30; example 4, col. 17 lines 46-47; example 5, col. 18, line 14; example 8, col. 18, line 66; and example 9, col. 19, lines 19-20). Blount teaches the production of polyurethane foams, which are chemical distinct from polyamide foams. Blount also teaches that polyols (polyhydroxyl compounds) (see col. 8, lines 49 and 61-62) can be polyesters (see col. 8, line 66) and teaches producing the polyesters using carboxylic acids. (see col. 9, lines 2-19).

The cited claims are not anticipated by Blount for at least the following reasons. Claim 31 is directed to an expandable polyamide composition that comprises three components:

- A: a compound having at least one isocyanate function;
- B: a polyamide; and
- C: a compound having at least one acid function, optionally a carboxylic acid function.

Blount discloses forming a polyurethane foam using the polyamide silicate resinous product of his invention. However, the claims of the instant application recite an expandable polyamide foam. In addition, the claims require the composition have the three components recited above. Blount does not teach using a compound having at least one acid function in a composition comprising the three components claimed in the instant application. Blount only teaches using an acid compound in making the polyamide that is later used in making the polyamide silicate resinous product which is later used in making a polyurethane foam. Therefore, claim 31 is not anticipated by Blount because Blount does not teach each element of claim 31.

Claims 39-43 and 47-49 depend from claim 31. These claims are not anticipated by Blount because claim 31, from which they depend, is not anticipated by Blount.

Claim 50 requires the step of heating an expandable foam composition comprising: (A) a compound having at least one isocyanate function; (B) a polyamide; and; (C) a compound having at least one acid function, optionally a

carboxylic acid function to a temperature of at least 80°C to obtain an alveolar structure. As discuss above for claim 31, Blount does not teach all of the elements of the expandable foam composition. Therefore claim 50 is not anticipated by Blount.

Claims 51 and 53 depend from claim 50. These claims are not anticipated by Blount because claim 50, from which they depend, is not anticipated by Blount.

Therefore claims 31, 39-43, 47-51 and 53 are not anticipated by Blount and these rejections should be withdrawn.

35 U.S.C. §103(a) Obviousness Rejections

1. Claims 32 and 34 have been rejected under 35 U.S.C. §103(a) as unpatentable over Blount (US 4,374,976) in view of Schönfeld et al. (US 5,760,147).

Applicants respectfully submit that these claims are not obvious over Blount in view of Schönfeld et al. and that these claims are allowable.

To establish a *prima facie* case of obviousness, three basic criteria must be met. (MPEP 2143) First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teachings of Blount have been described above under the 35 U.S.C. §102(b) rejections.

Schönfeld discloses a molding composition comprising: (1) at least one polyamide, and (2) at least one polymer containing sulfoxide groups. Schönfeld teaches that it was surprisingly found that the sulfoxide groups decompose under heat to form gases which lead to the foaming. Schönfeld does not disclose a three component composition and does not disclose one of the compounds of their composition being a compound having at least one acid function.

The Office Action indicates that Blount teaches the composition of claim 31 but is silent regarding the linearity and molecular mass of the polyamide and relies on Schönfeld to provide these elements. As was shown above in the discussion of the anticipation rejection, Blount does not teach the composition of claim 31. Schönfeld does not overcome the deficiencies of Blount.

To establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. There is no suggestion or motivation in Blount or Schönfeld to modify or combine the reference teachings on polyurethanes with teachings on polyamides to obtain the three component expandable polyamide composition required by these claims. One of ordinary skill in the art would not be motivated to combine reference teachings regarding a polyurethane with teachings regarding a polyamide because such a person would realize that they are distinct compositions formed from different starting materials. Therefore, there is no suggestion or motivation, either in the cited references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the

reference or to combine reference teachings to obtain the invention of the instant application.

To establish a *prima facie* case of obviousness, there must be a reasonable expectation of success. There is no reasonable expectation of success based on the teachings in Blount and Schönfeld that a three component expandable polyamide composition where one of the components is a compound having at least one acid function could be prepared because Blount and Schönfeld are silent on one of the components being a compound having at least one acid function. There cannot be a reasonable expectation of success in obtaining the Applicants' invention when the cited prior art does not provide any teachings regarding a required element in a composition. Therefore there is no reasonable expectation of success in producing the applicants' invention based on the teachings in the cited prior art.

To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Neither Blount nor Schönfeld teach or suggest a three component composition as required by the claims and do not teach or suggest that one of the components is a compound having at least one acid function. Therefore, the prior art references, either alone or combined do not teach or suggest all the claim limitations.

Applicants respectfully submit that claims 32 and 34 are not obvious over Blount in view of Schönfeld and this rejection should be withdrawn.

2. Claim 33 has been rejected under 35 U.S.C. §103(a) as unpatentable over Blount (US 4,374,976) in view of Letts. (US 5,891,563).

Applicants respectfully submit that claim 33 is not obvious over Blount in view of Letts and that claim 33 is allowable.

The teachings of Blount have been described above under the 35 U.S.C. §102(b) rejections.

Letts discloses composite boards with a foam core of polyisocyanurate or polyurethane materials. Letts discloses that the faces surrounding the core comprise a polymer layer that can include a polyamide.

The Office Action indicates that Blount teaches the composition of claim 31 but does not teach the polyamide is one of the claimed polyamides and relies on Letts to provide these elements. As was shown above in the discussion of the anticipation rejection, Blount does not teach the composition of claim 31. Letts does not overcome the deficiencies of Blount.

To establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. There is no suggestion or motivation in Blount or Letts to modify or combine the reference teachings on polyurethanes with teachings on polyamides to obtain the three component expandable polyamide composition required by these claims. One of ordinary skill in the art would not be motivated to combine reference teachings regarding a polyurethane with teachings regarding a composite boards with a foam core of polyisocyanurate or polyurethane materials surrounding by a polymer layer that can include a polyamide to obtain the claimed

invention. There is nothing in either Blount or Letts to suggest combining these two references. In addition, the combination of the two references does not result in the claimed invention. Therefore, there is no suggestion or motivation, either in the cited references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings to obtain the invention of the instant application.

To establish a *prima facie* case of obviousness, there must be a reasonable expectation of success. There is no reasonable expectation of success based on the teachings in Blount and Letts that a three component expandable polyamide composition where one of the components is a compound having at least one acid function could be prepared because Blount and Letts are silent on one of the components being a compound having at least one acid function. There cannot be a reasonable expectation of success in obtaining the Applicants' invention when the cited prior art does not provide any teachings regarding a required element in a composition. Therefore there is no reasonable expectation of success in producing the applicants' invention based on the teachings in the cited prior art.

To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Neither Blount nor Letts teach or suggest a three component composition as required by the claims and do not teach or suggest that one of the components is a compound having at least one acid function. Therefore, the prior art references, either alone or combined do not teach or suggest all the claim limitations.

Applicants respectfully submit that claim 33 is not obvious over Blount in view of Letts and this rejection should be withdrawn.

3. Claims 35 and 37 have been rejected under 35 U.S.C. §103(a) as unpatentable over Blount (US 4,374,976) in view of Glück. (US 5,959,069).

Applicants respectfully submit that claim 33 is not obvious over Blount in view of Glück and that claims 35 and 37 are allowable.

The teachings of Blount have been described above under the 35 U.S.C. §102(b) rejections.

Glück discloses H-shaped polyamides and their use in molded and extruded articles. Glück does not provide any teachings regarding expandable foam compositions or the combination of a polyamide with a compound having an acid function and an isocyanate.

The Office Action indicates that Blount teaches the composition of claim 31 but does not teach the polyamide is comprised of H-shaped macromolecular chains and relies on Glück to provide these elements. As was shown above in the discussion of the anticipation rejection, Blount does not teach the composition of claim 31. Glück does not overcome the deficiencies of Blount.

To establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. There is no suggestion or motivation in Blount or Glück to modify or combine the reference teachings on polyurethanes with teachings on polyamides used in forming molded or extruded articles to obtain the three component expandable polyamide composition required by these claims. One of ordinary skill in the art would not be motivated to combine reference teachings

regarding a polyurethane with teachings regarding a polyamide having because such a person would realize that they are distinct compositions formed from different starting materials. Therefore, there is no suggestion or motivation, either in the cited references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings to obtain the invention of the instant application.

To establish a *prima facie* case of obviousness, there must be a reasonable expectation of success. There is no reasonable expectation of success based on the teachings in Blount and Glück that a three component expandable polyamide composition, where one of the components is a compound having at least one acid function, could be prepared because Blount and Glück are silent on one of the components being a compound having at least one acid function. Glück only discloses the use a compound with an acid function (carboxylic acids) in making the H-shaped polyamides of their invention. Glück does not disclose the combination of a polyamide with a compound with an acid function and an isocyanate, as required by the claimed invention. There cannot be a reasonable expectation of success in obtaining the Applicants' invention when the cited prior art does not provide any teachings regarding a required element in a composition. Therefore there is no reasonable expectation of success in producing the applicants' invention based on the teachings in the cited prior art.

To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Neither Blount nor Glück teach or suggest a three component composition as required by the claims and do not teach or suggest that one of the components is a compound

having at least one acid function. Therefore, the prior art references, either alone or combined do not teach or suggest all the claim limitations.

Applicants respectfully submit that claims 35 and 37 are not obvious over Blount in view of Glück and this rejection should be withdrawn.

4. Claims 36 and 37 have been rejected under 35 U.S.C. §103(a) as unpatentable over Blount (US 4,374,976) in view of Di Silvestro. (US 6,867,256).

Applicants respectfully submit that claim 33 is not obvious over Blount in view of Di Silvestro and that claims 36 and 37 are allowable.

The teachings of Blount have been described above under the 35 U.S.C. §102(b) rejections.

Di Silvestro discloses a copolyamide formed by reacting a plurifunctional monomer with at least one bifunctional monomer, where these monomers have specific formulas. Di Silvestro discloses the use of the copolyamides in molded and extruded articles. Di Silvestro does not provide any teachings regarding expandable foam compositions or the combination of a polyamide with a compound having an acid function and an isocyanate.

The Office Action indicates that Blount teaches the composition of claim 31 but does not teach the polyamide is a copolyamide with a random arborescent structure and relies on Di Silvestro to provide these elements. As was shown above in the discussion of the anticipation rejection, Blount does not teach the composition of claim 31. Di Silvestro does not overcome the deficiencies of Blount.

To establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. There is no suggestion or motivation in Blount or Di Silvestro to modify or combine the reference teachings on polyurethanes with teachings on copolyamides to obtain the three component expandable polyamide composition required by these claims. One of ordinary skill in the art would not be motivated to combine reference teachings regarding a polyurethane with teachings regarding a copolyamide because such a person would realize that they are distinct compositions formed from different starting materials. Therefore, there is no suggestion or motivation, either in the cited references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings to obtain the invention of the instant application.

To establish a *prima facie* case of obviousness, there must be a reasonable expectation of success. There is no reasonable expectation of success based on the teachings in Blount and Di Silvestro that a three component expandable polyamide composition where one of the components is a compound having at least one acid function could be prepared because Blount and Di Silvestro are silent on one of the components being a compound having at least one acid function. There cannot be a reasonable expectation of success in obtaining the Applicants' invention when the cited prior art does not provide any teachings regarding a required element in a composition. Therefore there is no reasonable expectation of success in producing the applicants' invention based on the teachings in the cited prior art.

To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Neither Blount nor Di Silvestro teach or suggest a three component composition as required by the claims and do not teach or suggest that one of the components is a compound having at least one acid function. Therefore, the prior art references, either alone or combined do not teach or suggest all the claim limitations.

Applicants respectfully submit that claims 36 and 37 are not obvious over Blount in view of Di Silvestro and this rejection should be withdrawn.

5. Claim 38 has been rejected under 35 U.S.C. §103(a) as unpatentable over Blount (US 4,374,976) in view of Bouquerel et al. (US 6,872,800).

Applicants respectfully submit that claim 38 is not obvious over Blount in view of Bouquerel and that claim 38 is allowable.

The teachings of Blount have been described above under the 35 U.S.C. §102(b) rejections.

Bouquerel discloses hyperbranched copolyamides and their use as melt viscosity modifiers in producing yarns, fibers, films and molded parts. Bouquerel does not provide any teachings regarding expandable foam compositions or the combination of a polyamide with a compound having an acid function and an isocyanate. Bouquerel discloses that their claimed copolyamide may be formed using an acid, but does not disclose using their claimed copolyamide would subsequently be used with a compound having an acid function, as required in the claims.

The Office Action indicates that Blount teaches the composition of claim 31 but does not teach the polyamide is a hyperbranched copolyamides and relies on Bouquerel to provide this element. As was shown above in the discussion of the anticipation rejection, Blount does not teach the composition of claim 31. Bouquerel does not overcome the deficiencies of Blount.

To establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. There is no suggestion or motivation in Blount or Bouquerel to modify or combine the reference teachings on polyurethanes with teachings on polyamides to obtain the three component expandable polyamide composition required by these claims. One of ordinary skill in the art would not be motivated to combine reference teachings regarding a polyurethane with teachings regarding a hyperbranched copolyamide because such a person would realize that they are distinct compositions formed from different starting materials. Therefore, there is no suggestion or motivation, either in the cited references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings to obtain the invention of the instant application.

To establish a *prima facie* case of obviousness, there must be a reasonable expectation of success. There is no reasonable expectation of success based on the teachings in Blount and Bouquerel that a three component expandable polyamide composition where one of the components is a compound having at least one acid function could be prepared because Blount and Bouquerel are silent on one

of the components being a compound having at least one acid function. There cannot be a reasonable expectation of success in obtaining the Applicants' invention when the cited prior art does not provide any teachings regarding a required element in a composition. Therefore there is no reasonable expectation of success in producing the applicants' invention based on the teachings in the cited prior art.

To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Neither Blount nor Bouquerel teach or suggest a three component composition as required by the claims and do not teach or suggest that one of the components is a compound having at least one acid function. Therefore, the prior art references, either alone or combined do not teach or suggest all the claim limitations.

Applicants respectfully submit that claim 38 is not obvious over Blount in view of Bouquerel and this rejection should be withdrawn.

6. Claims 44-46 and 52 have been rejected under 35 U.S.C. §103(a) as unpatentable over Blount (US 4,374,976) in view of Morishige et al. (US 5,817,425).

Applicants respectfully submit that claim 33 is not obvious over Blount in view of Morishige and that claims 44-46 and 52 are allowable.

The teachings of Blount have been described above under the 35 U.S.C. §102(b) rejections.

Morishige discloses a layered polyamide film with a polyamide substrate. Morishige discloses using a polyamide obtained by polycondensation of a dibasic acid and a diamine. Morishige does not disclose an the polyamide in combination

with a compound having at least one acid function. Morishige is silent on an expandable foam composition.

The Office Action indicates that Blount teaches the composition of claim 31 but does not teach the isocyanate is protected with a protecting group, or the polyamide forms part of a liquid emulsion, and relies on Morishige to provide these elements. As was shown above in the discussion of the anticipation rejection, Blount does not teach the composition of claim 31. Morishige does not overcome the deficiencies of Blount.

To establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. There is no suggestion or motivation in Blount or Morishige to modify or combine the reference teachings on polyurethanes with teachings on copolyamides to obtain the three component expandable polyamide composition required by these claims. One of ordinary skill in the art would not be motivated to combine reference teachings regarding a polyurethane with teachings regarding a copolyamide because such a person would realize that they are distinct compositions formed from different starting materials. Therefore, there is no suggestion or motivation, either in the cited references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings to obtain the invention of the instant application.

To establish a *prima facie* case of obviousness, there must be a reasonable expectation of success. There is no reasonable expectation of success based on the teachings in Blount and Morishige that a three component expandable polyamide composition where one of the components is a compound having at least one acid function could be prepared because Blount and Morishige are silent on one of the components being a compound having at least one acid function. There cannot be a reasonable expectation of success in obtaining the Applicants' invention when the cited prior art does not provide any teachings regarding a required element in a composition. Therefore there is no reasonable expectation of success in producing the applicants' invention based on the teachings in the cited prior art.

To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Neither Blount nor Morishige teach or suggest a three component composition as required by the claims and do not teach or suggest that one of the components is a compound having at least one acid function. Therefore, the prior art references, either alone or combined do not teach or suggest all the claim limitations.

Applicants respectfully submit that claims 44-46 and 52 are not obvious over Blount in view of Morishige and this rejection should be withdrawn.

7. Claim 54 has been rejected under 35 U.S.C. §103(a) as unpatentable over Blount (US 4,374,976) in view of Sato et al. (US 4,028,287).

Applicants respectfully submit that claim 38 is not obvious over Blount in view of Sato and that claim 54 is allowable.

The teachings of Blount have been described above under the 35 U.S.C. §102(b) rejections.

Sato discloses a process for the preparation of a foam polyamide by ring-opening polymerization of polymerizable lactams in the presence of a basic catalyst, a promoter and a foaming agent. Sato teaches a two component system where the first composition contains the selected lactam and the basic catalyst; and the second composition containing the selected promoter and the foaming agent. Sato is silent on one of the compounds in a three component system having at least one acid function.

The Office Action indicates that Blount teaches the process of claim 50 but is silent on the density of the foam product. As was shown above in the discussion of the anticipation rejection, Blount does not teach the composition of claim 31, which is required in step a) of the process. Sato does not overcome the deficiencies of Blount.

To establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. There is no suggestion or motivation in Blount or Sato to modify or combine the reference teachings on polyurethanes with teachings on polyamides to obtain the three component expandable polyamide composition required by these claims. In fact Sato teaches away from a three component system where one of the components has at least one acid function, by requiring a basic catalyst. One of ordinary skill in the art would also not be motivated to combine reference teachings regarding a polyurethane with teachings regarding a polyamide

because such a person would realize that they are distinct compositions formed from different starting materials. Therefore, there is no suggestion or motivation, either in the cited references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings to obtain the invention of the instant application.

To establish a *prima facie* case of obviousness, there must be a reasonable expectation of success. There is no reasonable expectation of success based on the teachings in Blount and Sato that a three component expandable polyamide composition where one of the components is a compound having at least one acid function could be prepared because Blount and Sato are silent on one of the components being a compound having at least one acid function. There cannot be a reasonable expectation of success in obtaining the Applicants' invention when the cited prior art does not provide any teachings regarding a required element in a composition. In addition, because Sato teaches away from the presence of an acidic compound by requiring a basic catalyst, there cannot be a reasonable expectation of success when a cited references teaches away from a required element. Therefore there is no reasonable expectation of success in producing the applicants' invention based on the teachings in the cited prior art.

To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Neither Blount nor Sato teach or suggest a three component composition as required by the claims and do not teach or suggest that one of the components is a compound having at least one acid function. Therefore, the prior art references, either alone or combined do not teach or suggest all the claim limitations.

Applicants respectfully submit that claim 54 is not obvious over Blount in view of Sato and this rejection should be withdrawn.

In view of the foregoing, it is believed that all record rejections are untenable and should be withdrawn. Further, favorable action in the form of a Notice of Allowance is believed to be next in order and is respectfully solicited.

Respectfully submitted,

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Date: August 20, 2008

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